

Russian Counterspace Defense Initiative

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Russia's counterspace weapon initiatives provide a comparative advantage for conflicts with the West near Russian territory. Over the past several years, Russia has developed an arsenal of kinetic and non-kinetic counterspace weapons capable of disrupting, denying, degrading, or destroying the spacecraft upon which Western economies and militaries rely for global operations. These weapons provide Russia the ability to significantly degrade the ability of the West to interfere in Russia's near abroad without striking into any Western nation's territory or killing their citizens. The West's lack a credible response to a Russian counterspace threat provides an advantage to deter Western intervention.

Russia's counterspace capabilities include weapons such as electromagnetic jammers that create temporary disruption or denial of access to space systems and weapons using directed energy and kinetic-kill mechanisms that permanently degrade or destroy spacecraft.¹ This broad range of counterspace weapon types Russia has developed provide options at every level of warfare from limited counterinsurgency and proxy conflict to high-intensity warfare with the West. Russia perceives that the US and its allies with interoperable militaries in NATO rely upon spacepower to communicate, collect intelligence, navigate, guide weapons, and defend against missile attacks across the globe. Spacepower provides the West a global power projection infrastructure, which it has chosen not to defend. Counterspace weapons provide Russia the ability to degrade NATO's ability to project military power into Russia's near abroad by targeting Western critical vulnerabilities in space.

Threatening Western spacecraft provides Russia an advantage to deter or defeat a space-enabled military intervention in regions for which Russia has developed terrestrial military infrastructure. If a NATO member were to choose to employ direct military force against Russia in Ukraine for example, Russia could significantly reduce that nation's fighting ability by

neutralizing its space-based intelligence, communications, navigation, and weapons guidance. Up to this point, Russia has limited its use of counterspace weapons to temporary non-destructive effects against only a limited set of Western space capabilities supporting Ukrainian military operations.² However, if a Western nation were to choose to use direct lethal force against Russia, its destructive counterspace options provide the means to permanently reduce the effectiveness of Western intervention without conducting lethal strikes into the national territory of any NATO member.

The non-lethal nature of destructive counterspace attacks provide Russia a deterrence advantage against the West. Western spacecraft are unmanned and operate outside of national territory, but Russian counterspace weapon systems are manned and launch from sovereign national territory. To stop a destructive attack on unmanned critical space infrastructure, the West would have to be willing to risk nuclear escalation by conducting precision global strike against counterspace systems in Russia. Russia, on the other hand, could conduct a counterspace attack without killing any Western citizens or attacking their territory. Russia could reasonably believe the West would be unwilling to risk nuclear escalation to defend its unmanned space infrastructure, giving Russia an option to deter or defeat Western intervention before escalating to nuclear conflict.³

Russia has developed its broad spectrum of counterspace weapons because it perceives the West's space systems to be a critical vulnerability. These weapons provide Russia the ability to significantly degrade the ability of the West to interfere in Russia's near abroad and provide an advantage to deter Western intervention. Russia's counterspace weapon initiatives provide a comparative advantage for conflicts with the West near Russian territory.

End Notes

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1. Weeden, Brian, and Victoria Sampson. *Global Counterspace Capabilities: An Open Source Assessment*. (Washington, DC: Secure World Foundation, April 2021), 2-1.
 2. Hitchens, Theresa, “‘Local’ Russian GPS jamming in Ukraine hasn’t affected US support ops, so far,” *Breaking Defense*, March 1, 2022, <https://breakingdefense.com/2022/03/local-russian-gps-jamming-in-ukraine-hasnt-affected-us-support-ops-so-far>.
 3. Hennigan, W. J., “Exclusive: Strange Russian Spacecraft Shadowing U.S. Spy Satellite, General Says,” *Time*, February 10, 2020, <https://time.com/5779315/russian-spacecraft-spy-satellite-space-force>. The US demarche regarding Russia’s threat to its National Technical Means did not mention any risk of nuclear escalation.